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Expanded accounts for the household sector including non-profit institutions, serving households (NPISH)

What's going on within the households sector? A picture beyond the macro view

Prepared by Statistics Netherlands

Summary

This paper presents two research projects within Statistics Netherlands, both aiming to shed light on the distributions beyond the macro aggregates. Both cover the households sector, but there are clear distinctions in the purposes of the projects and the approaches taken. The household breakdown offers distributions of income, consumption and wealth over different household groups. The ageing society project aims to add the age dimension to the national accounts, bringing forward the intergenerational flows. This article covers both projects, explaining the methodology and showing some results.

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I. Introduction and background

1. Over the last years, we have seen an increased demand for socio-economic statistical information in the National Accounts. Bringing additional micro data in the National Accounts framework is necessary for economic analysis beyond the macro aggregates. Currently, Statistics Netherlands focuses on two on going developments in the households sector:

(a) Performing a breakdown of household income, consumption, and wealth,

(b) Measuring the ageing society.

2. The breakdown of household income, consumption and wealth was initiated by the report of the Commission on the measurement of economic performance and social progress. The aim of the Commission was "to identify the limits of GDP as an indicator of economic performance and social progress, including the problems with its measurement; to consider what additional information might be required for the production of more relevant indicators of social progress; to assess the feasibility of alternative measurement tools, and to discuss how to present the statistical information in an appropriate way" (Stiglitz, Sen, & Fitoussi, 2009, p.7). Some of the recommendations of the Commission were to:

(a) focus on income and consumption rather than production,

(b) emphasise the household perspective,

(c) consider income and consumption jointly with wealth,

(d) give more prominence to the distribution of income, consumption and wealth.

3. These recommendations were further elaborated upon in the Expert Group on measuring Disparities in a National Accounts framework (EGDNA). This Expert Group aimed to assess whether it is possible to develop a harmonized framework for the distribution of household income, consumption and wealth. This led to several publications regarding the breakdown of the household accounts, either presenting the country practices (Accardo *et al*, 2009; Braakmann & Schwahn, 2012; Durier & Richet-Mastain, 2012; Australian Bureau of Statistics, 2013; Bruil & Koymans, 2014) or the results of the Expert Group's efforts to harmonize the approaches of the participating members (Fesseau & Mattonetti, 2013).

4. The second project aims to measure the impact of changing demographics. In many developed countries, both fertility and mortality figures are decreasing. These developments result in an ageing society. In the Netherlands, the baby boom generation reaches the retirement age, resulting in an increase of the grey pressure (Van Duin & Stoeldraijer, 2012). This puts great pressure on public financed health care for example, as the elderly have on average much higher healthcare costs. The sustainability of unfunded pensions is a similar problem, and intergenerational equality answers the question who pays to, and who benefits from the current welfare system.

5. The issues regarding the ageing society arise from the economic lifecycle. This shows that the patterns of consumption needs and the ability to satisfy those needs through labour are not in line with each other at the specific stages in one's lifetime. The young and the elderly consume more than they produce, whereas the middle-aged (working aged) produce more than they consume. In order to maintain a certain consumption level over the economic lifecycle economic flows have to be reallocated. This can be done by adapting savings decision to smooth savings over time (Modigliani & Brumberg, 2005) or by flows

between generations, first shown by an overlapping generations model of Samuelson (1958). Intergenerational flows are carried out either by the government (unfunded pension schemes for example), the market (funded pension schemes), or the family (parents paying for the consumption needs of their children).

6. For this project the research work of the National Transfer Accounts (NTA) project was taken as the starting point (Lee & Mason, 2011). This NTA project aims to '*provide a systematic and comprehensive approach to measuring the economic flows from a generational perspective*' (United Nations, 2013, p. 2). Statistics Netherlands does not take part in this NTA project, but their approach is considered promising to capture the generational dimension in an SNA perspective. The proposed methodology in the NTA manual is not in all instances used for the Dutch project however, for example the NTA focuses on the total economy, whereas Statistics Netherlands limits the scope to the household sector.

7. This paper aims to give an overview of the work done at Statistics Netherlands for the households sector. It focuses on the two mentioned projects and shows the preliminary results gained by this research. The next section shows the methodology used in both projects and the overlap and differences between them. After that, the preliminary results from both projects are presented.

II. Methodology

8. The projects mentioned in the introduction are similar because of the nature of the approach. In both projects the aim is gaining a better insight in distributions within the households sector. In the breakdown project this aim helps evaluating welfare; in the project about the ageing society this helps understanding the intergenerational flows. Both projects combine the National Accounts data on the households sector with distributional information taken from (the same) micro data sources. The differences between the two projects are also clear (see table 1). The household breakdown stays in line with the framework of the national accounts as this is laid out in the System of National Accounts (United Nations, 2009). The ageing society deviates for a large part from this framework and the concepts used therein. From the above two projects, one can immediately notice the duality of the two fundamental analytic units - household(s) and individual(s). Statistics Netherlands currently focuses on these two perspectives when looking beyond the macro aggregates. The biggest difficulty in this is that micro data is often available only on the household level or only on the individual level. This issues is tackled in the two projects and the way how is presented in the methodology section.

Table 1
Overlap and differences

Project:	**Household breakdown**	**Ageing Society**
Institutional sector:	Households	Households
Institutional unit:	Household	Individual
Sequence of accounts:	SNA	NTA
Breakdown categories:	(i) Age of the head of the household, (ii) household composition, (iii) housing status, (iv) main source of income, (v)	Age of the individual
Data sources:	Income Panel Survey (IPS)	Income Panel Survey (IPS)
	Household Budget Survey (HBS)	Household Budget Survey (HBS)
	Education Statistics (ES)	Education Statistics (ES)
	Healthcare Statistics (HS)	Healthcare Statistics (HS)
	Pension Claims Statistics (PCS)	
Dimensions covered:	Income, Consumption, Wealth	Income, Consumption

9. The NTA is built around the economic lifecycle, therefore the breakdown category is the age of the individual. The household breakdown is done for five categories. mentioned in the table above and Annex A. The dimensions that are covered are similar for both projects, except that the wealth dimension is not yet considered for the ageing society. Because the sequence of accounts differ between the projects, the concepts of income and consumption differ somewhat as well.

10. Distributional information is gathered from several micro sources. The income components are largely covered by the Income Panel Survey, which is an annual survey consisting of administrative records from multiple registers. It covers approximately 200,000 individuals and 92,000 households for 2008. The IPS also includes wealth components; these are also only available for households (Claessen, 2010). The Social Transfers in Kind (mainly healthcare and education expenditures) were allocated to each individual by imputing an average amount for the age-gender stratum he or she belonged to. The data sources that provide the averages are the Education Statistics (ES) and the National Institute for Public Health and the Environment (RIVM, 2011). This imputation was made using register data on the number of individuals and the number of households. These two registers were linked with an identification code, so for each individual the household was known, and for each household the individuals were known. This approach was used for both projects. The Pension Claims statistics were used to allocate the pension funds over households; the ageing society did not yet cover the wealth dimension. These pension claims are available on an individual level however. For other wealth components

the distribution over individual household members is more difficult. Private consumption is covered by the Household Budget Survey; this is an annual cross-sectional survey of around 3,600 individuals and 1,500 households. This survey contains all the breakdown categories for the households, but a distinction for the age of the individual is not available.

A. Household breakdown

11. The household breakdown sticks to the SNA concepts. The scope of the project is the households sector, which "*covers individuals or groups of individuals as consumers and possibly also as entrepreneurs producing market goods and non-financial and financial services*" (ESA 1995, §2.75). A household is defined as a "*group of persons who share the same living accommodation, who pool some, or all, of their income and wealth and who consume certain types of goods and services collectively, mainly housing and food*" (SNA 2008, §4.149). Within this households sector 5 categories are identified; household composition, standard of living, age of the head of the household, housing status and main source of income. A complete overview of the household categories and groups within those categories is given in annex A.

12. The aim of the household breakdown project was to enrich the existing National Accounts totals for households with distributions over household groups. The breakdown follows the SNA sequence of accounts. It presents the breakdown for the allocation of primary income account, the secondary distribution of income account, the redistribution of income in kind account, the use of adjusted disposable income account and the balance sheets. The dimensions covered are therefore (adjusted) disposable income, (actual) final consumption, and wealth.

13. The breakdown is performed in 3 steps. These were harmonized in the Expert Group on measuring Disparities in a National Accounts framework (EGDNA). A numerical example is given in table 2 for the wages and salaries in 2008.The first step was to link SNA transactions to the closest (combination of) micro variable(s). This link was made using three methods, presented in Figure 1 (Bruil & Koymans, 2014). This is the same approach as used in the Expert Group, and was inspired by the work done by the French Statistical Office (Accardo et al., 2009). Following Braakmann and Schwahn (2012), this approach will be called the *OECD basic approach*.

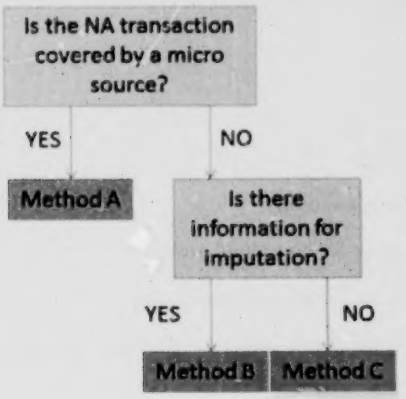
(a) Method A was used when the micro sources comprised distributional information for the NA transaction that was considered. In this case the distributional information was used to allocate the NA totals over household groups.

(b) Method B was used when this direct link was not available, but when:

- Distributional information was imputed on the micro level, or
- A proxy was used.

(c) Method C was used when method A or B were not feasible and no link with distributional information could be made. This method distributed the transactions in the same way as the sum of the transactions that could be distributed through method A or B. This way ensured that inequalities were not depending on these items.

Figure 1
OECD basic approach



14. The second step involved the calculation of totals. When for every NA transaction distributional information was gathered and allocated (row 1 in the table below), the average amounts for the micro variables was taken and multiplied with the average number of households in that year (row 2). This resulted in a total based upon the micro variables (row 3). The third and final step was the calibration of these totals to the SNA total for the transaction that was considered (row 4). This was done using the coefficient of the micro total and the NA total (226,408 / 241,193 = 0.939). This coefficient was used to calibrate the micro totals per household group to the NA total.

Table 1
Benchmark of 'wages and salaries' (2008 data)

		Q1	Q2	Q3	Q4	Q5	Total
1	*Average-income from employment according to microdata(euros)*	*6,302*	*15,678*	*28,809*	*42,845*	*68,748*	
2	*Average # of households in NA (*1000)*	1,485	1,485	1,485	1,485	1,485	7,425
3	*Micro total (million euros)*	9,360	23,286	42,791	63,641	102,115	241,193
4	**Wages and salaries(NA)**	**8,787**	**21,859**	**40,168**	**59,739**	**95,855**	**226,408**

15. Having distributions available is one thing, more interesting is what can be said about those distributions. The EGDNA proposed the development of indicators for measuring the inequality. These indicators were: the ratio between the highest and the lowest value of the household groups, the ratio from the average and the disparity index. This index shows the dispersion from the average across all household groups. It is calculated as the ratio of the standard deviation to the mean (Fesseau & Mattonetti, 2013):

$$CV_2 = \frac{\sqrt{\frac{1}{N} \times \Sigma_{i \in z}[n_i \times (\bar{x}_i^{NA_adj} - \bar{x}^{NA_adj})^2]}}{\bar{x}^{NA_adj}} * 100$$

Where:

z = household category

i = household group

n_i = total number of households in group i

N = total number of households in the population

$\bar{x}_i^{NA_adj}$ = average adjusted disposable income for household group i

$\bar{x}^{NA_adj}$ = average adjusted disposable income for the total population

In the results section of the household breakdown the distributions for 2009 and inequalities from 2005-2009 will be presented.

B. Ageing society

16. The SNA states that "*the household as a whole rather than the individual persons in it must be treated as the institutional unit*" (SNA 2008, §4.5). The reasoning behind this is that income and wealth is pooled together and consumption decisions are taken jointly within the household. However, the generational perspective can only be served meaningfully on the level of the individual, because a household often covers multiple generations. Moreover intergenerational flows occur for a large part **within** the household. A focus on the household as an institutional unit would therefore be insufficient. This does raise many issues however because distributional information is often only available on the household level. The SNA says it is *impossible* to draw up meaningful accounts for individuals, but I prefer to say it is challenging. The NTA proposes a methodology to achieve the distribution over the economic lifecycle.

17. The NTA deviates from the SNA concepts is various ways. One important aspect is the sequence of accounts that is used. The NTA proposes a different series of tables (hereafter called accounts for practical reasons), intended to present the intergenerational flows in the best suited way. The economic lifecycle is presented in the first account. This account shows the labour income and consumption for each age group. This clearly shows that there are broadly speaking three stages in one's lifetime:

(a) youth, when you're depending on your parents to pay for your meals and on the government to provide education,

(b) working age, when your labour income is more than sufficient to pay for your consumption needs, you can even save,

(c) old age, when again you are depending on others, the government pays a state pension every month and you are able to save some yourself for these years.

18. Only in the second stage you can provide for your own consumption needs. In the other two stages you depend on others, either through government institutions or market institutions (of which the family is one). The difference between the labour income and consumption is called the **lifecycle deficit**. This lifecycle deficit has to be covered, by definition, by reallocations.

19. These reallocations fall into two groups: transfers and asset based reallocations. Transfers are transactions between two institutional units when there is no explicit quid pro

quo (United Nations, 2013, p. 4). For example, taxes are a flow from an individual to the government, without a flow returning that can directly be linked to the taxes. Of course the taxes result in public spending of which the individual benefits as well, but the link in how much cannot be made explicit. Asset based reallocations are either property income or capital income, both involve an underlying asset that can be used in a later time to yield income. The difference between capital income and property income is whether or not it can be used in the production process. Both transfers and asset based reallocations are divided into public and private flows.

20. Currently the focus of the National Transfer Accounts is limited to these three accounts; the economic lifecycle account, the transfer account and the asset based reallocations account. Further development should lead to the publication of also the household production account, the capital transfer account and the wealth account.

21. For all NTA transactions the distributional information is linked in the same way as it is done for the household breakdown in the previous section, but with information on the individual level. Data availability on the individual level is limited however. The Income Panel Survey covers both the individual level and the household level for the income components. Wealth is only available for the household. Also the private consumption is gathered in the household level. The wealth accounts are not yet covered, but for private consumption an allocation method had to be found to distribute the household consumption over the individual members of the household. This was done using equivalence scales. These equivalence scales are used to adjust for economies of scale within a multiperson household, recalculating it to a one person household. For the NTA we use these equivalence scale to allocate the known household consumption total over the individual members of the household.

22. Average consumption expenditure is known on the level of several household categories and groups. The first step was to link the average consumption expenditures to the households, by household composition. For all households the individuals are known and listed in the survey. The second step was to allocated the average amount per household over the members of the household using an equivalence scale. For this purpose we used the equivalence scale recommended by the NTA project (United Nations, 2013, p. 100). Every person of 20 years and older is assigned the value 1. Every child of 4 years and younger gets assigned the value 0.4. The scale increases linearly for the ages in between. The individual private consumption is estimated by multiplying the average household expenditures with the equivalence scale as a fraction of the sum of the equivalence scales in the household. The table below gives an example of this approach.

Table 3
Example of the allocation of individual private consumption

Household ID	*Household composition*	*Age of household member*	*Average household expenditures*	*Equivalence scale*	*Individual private consumption*
120010250	Couple with children	1	43,401	0.400	5,960
120010250	Couple with children	29	43,401	1.000	14,899
120010250	Couple with children	7	43,401	0.513	7,643
120010250	Couple with children	35	43,401	1.000	14,899
⋮	⋮	⋮			⋮

23. In this example the household composition is 'couple with children' for which the average household expenditures are 43,401 euros. Every household member gets assigned an equivalence scale based upon their age. The sum of equivalence scales in the household is 2.913. The adult members (with equivalence scale weight 1.000) are estimated to have an individual private consumption of 14,899 euros ((1/2.913)*43,401).

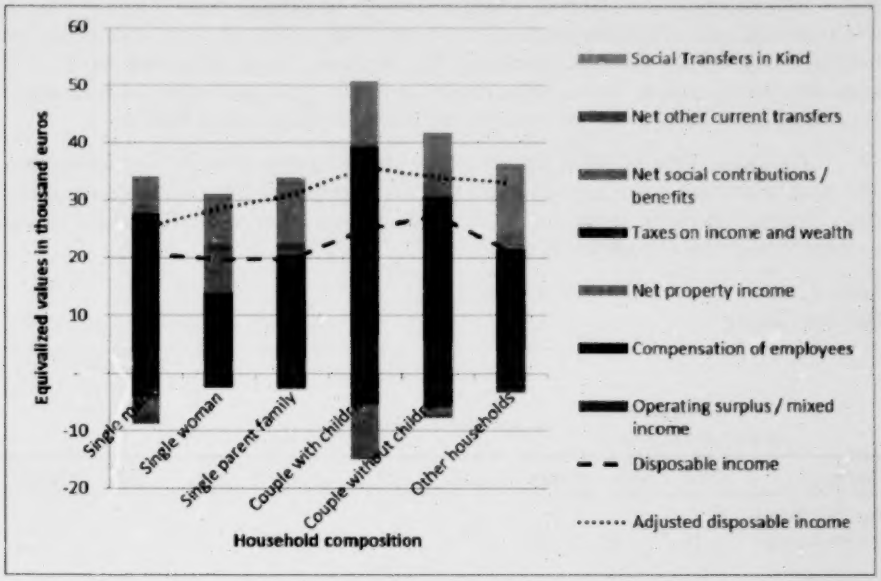
24. An important aspect of the Ageing Society are the flows within households. These do not show when the household is taken as an institutional unit, because inflows and outflows cancel each other out on this level. When the individual is considered, these flows are becoming increasingly important. Micro data on these flows are not available, in order to capture these flows the methodology of the NTA manual is followed. For each individual in the micro source a disposable income is calculated and private consumption is known. If the difference is negative this is covered by the household head. This flow from the household head to the other members is an intrahousehold inflow for the other members and an intrahousehold outflow for the household head.

III. Results for the household breakdown

25. The breakdown for the households is developed for 2005-2009. In September 2014 the results until 2011 will be published, based upon the revised National Accounts data. Indicators are based upon the equivalized values for each household group. These equivalized values are calculated using the equivalence scales. In this case the Oxford Modified Equivalence Scale is used, because it was the most commonly used and therefore preferred scale in the EGDNA[1]. Many more scales are possible. In fact the choice of equivalence scale can influence the resulting inequalities (Siermann, Van Teeffelen, & Urlings, 2004).

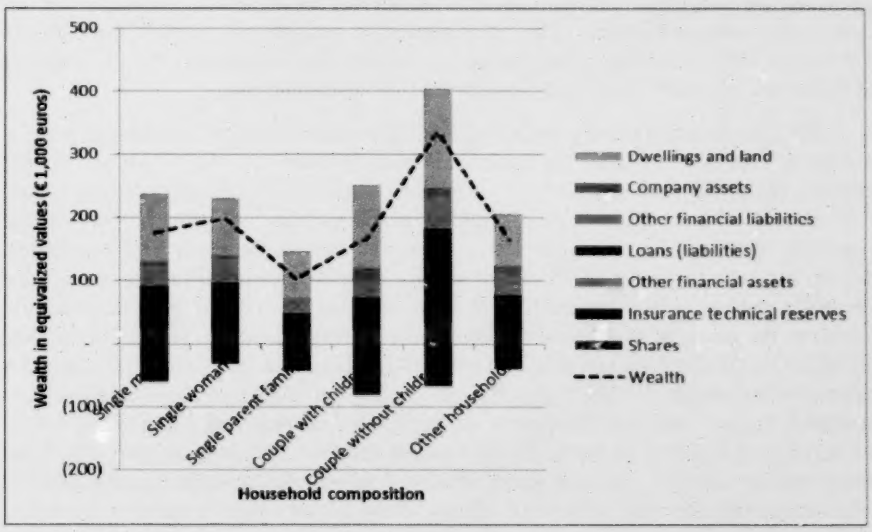
[1] This scale assigns the values 1 to the head of the household, 0.5 to every other household member aged 14 years or over and 0.3 to every other household member younger than 14 years.

Figure 2
Equivalized adjusted disposable income by household composition



26. The figure above shows the distribution of equivalized (adjusted) disposable income. Also the transactions forming these balancing items are given. Adjusted disposable income is highest for couples with children and lowest for single men. The difference between the adjusted disposable income and disposable income is made by the social transfers in kind. The figure shows there are several redistributive transactions involved. All household groups pay more social contributions than they receive in benefits except for single women. Also net other current transfers are only positive for single women and single parent households. These are mainly alimony payments, which are often paid by men to women.

Figure 3
Equivalized wealth by household composition



27. The results for wealth are very interesting, not much is known yet on the distribution of wealth in the National Accounts. It shows that wealth in the Netherlands is for a large part in insurance technical reserves, which are mainly the pension funds. Also the value of dwellings and land underlying dwellings is an important aspect. The loans (liabilities) are mainly the mortgages on those dwellings. The company assets are owned by the self-employed, these include, among other items, software, cultivated assets and machines. Wealth is highest for couples with children and lowest for single parent families.

28. The focus of the EGDNA was for a large part on indicators explaining inequalities. The table below shows the disparity index for two years and all five household categories. An increasing disparity index means that the dispersion over the household groups increased, indicating that inequality grew.

Table 4
Disparity index

	Inequality in:								
	adjusted disposable income			*actual consumption*			*wealth*		
Category	2005	2009	change	2005	2009	change	2005	2009	change
Age of head of the household	10	8	-2	6	6	-0	54	55	2
Household composition	9	10	1	6	4	-2	33	36	3
Standard of living	37	31	-6	19	14	-5	71	68	-3
Main source of income	20	15	-5	7	7	0	57	59	2
Housing status	18	16	-2	9	8	-2	52	54	2

29. The disparity index is calculated for all three dimensions; adjusted disposable income, actual consumption and wealth. For the adjusted disposable income the index rose only when the household composition was considered, meaning that inequality for this characteristic increased slightly. The other household categories knew less inequality in 2009 than in 2005. For consumption the change is either zero or negative for all categories and for wealth inequality rose mostly, except for the standard of living.

30. The change in this index is negative for all dimensions when the standard of living is considered. This category ranks the households from the poorest to the richest and divides them into groups of equal size (20% groups). The decrease in income inequality is caused by the development of the operating surplus / mixed income; this grew slightly for the households in the middle range, but decreased for the poorest and the richest households. Another influence is the net social contributions / benefits; this improved for the poorest households, but the richest households pay more on a net basis. For wealth this decrease was due to the financial assets (mainly the pension funds) which rose most in the middle class (Q2, Q3, Q4), and the non-financial wealth (dwellings and land) which rose most for the poorest households. Wealth inequality increased when other household categories are considered. Figure 3 showed that wealth was highest for couples with children and lowest for single parent families; the latter saw their wealth decrease from 2005 to 2009, where the former knew an increase. These extremes within the household categories are also covered by the second indicator, the ratio of the highest to the lowest value. A value of 1.0 would

mean that there is no inequality and every consumption unit earns, consumes or possesses just as much as any other consumption unit.

Table 5
Ratio highest to the lowest

	Inequalityin:								
	adjusted disposable income			*actual consumption*			*wealth*		
Category	2005	2009	change	2005	2009	change	2005	2009	change
Age of head of the household	1,4	1,3	-0,1	1,2	1,2	-0,0	5,9	7,9	2,0
Household composition	1,4	1,4	0,0	1,2	1,1	-0,1	2,9	3,3	0,3
Standard of living	2,9	2,5	-0,4	1,6	1,5	-0,2	7,4	7,0	-0,4
Main source of income	2,4	2,0	-0,4	1,3	1,3	0,0	6,5	8,5	2,0
Housing status	1,7	1,5	-0,2	1,3	1,2	-0,1	12,7	13,8	1,1

31. Patterns of inequality are similar to the first indicator; when the extreme values are closer together, the entire distribution is within smaller boundaries. This does not necessarily be reflected in similar signs, but the table below does show that this is often the case.

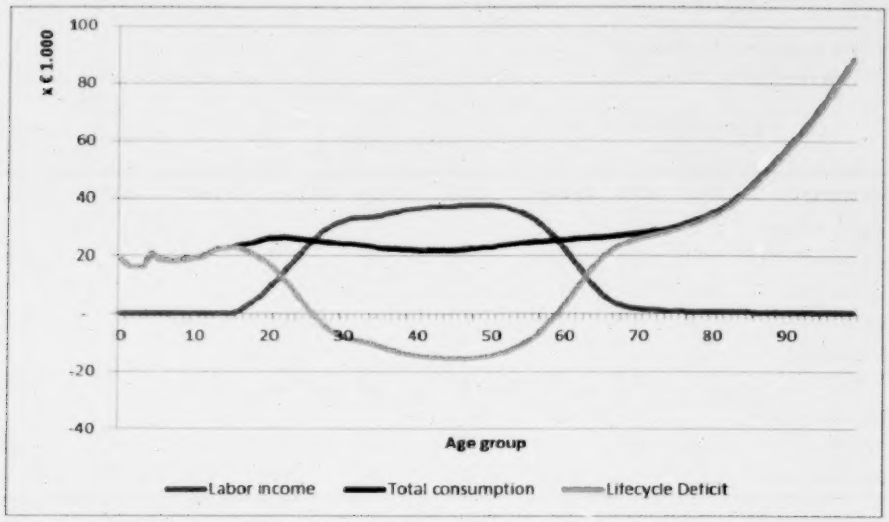
Table 6
Directions of inequality (2005-2009) for the Disparity index (D.I.) and the ration highest to the lowest (H/L)

	Adjusted disposable income		*Actual Consumption*		*Wealth*	
	D.I.	H/L	D.I.	H/L	D.I.	H/L
Age of head of the household	↓	↓	-	-	↑	↑
Household composition	↑	-	↓	↓	↑	↑
Standard of living	↓	↓	↓	↓	↓	↓
Main source of income	↓	↓	-	-	↑	↑
Living situation	↓	↓	↓	↓	↑	↑

IV. Results for the ageing society

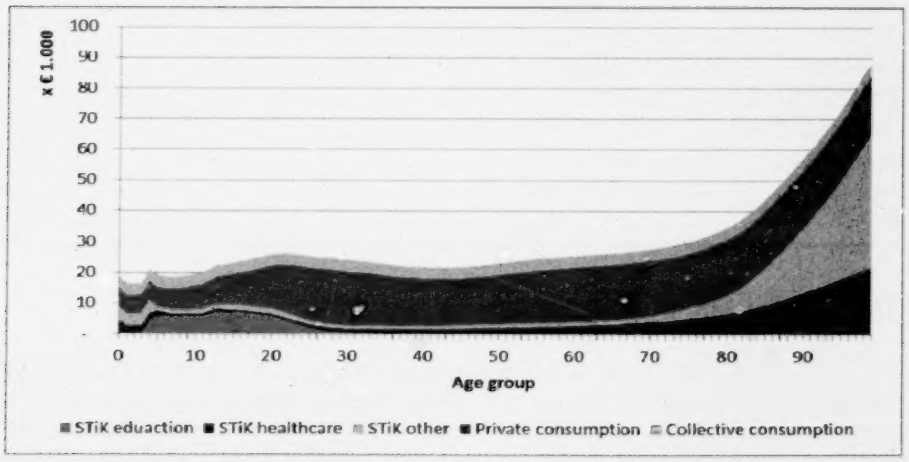
32. The results obtained so far in the project are based on the year 2008. The focus of the ageing society project is to bring forward the intergenerational flows that are used to cover consumption needs in the different stages in the economic lifecycle. However, the results and graphs presented here are a cross-section for one year, so careful interpretation is needed when projections to future situations are made. These graphs do not present the lifecycle of one specific person in time, but of different age groups in one moment in time.

Figure 4
Economic lifecycle account



33. The economic lifecycle account gives the lifecycle deficit; the difference between labor income and consumption. It shows that this deficit is only negative (and thus a surplus), for the age groups between roughly 25 years and 60 years. Figure 4 shows the average values for labor income; this is not the average wage because also the individuals that do not earn labor income are represented in the age groups. Average consumption comprises private consumption, the individual consumption of the government (social transfers in kind) and collective consumption. The latter consumption component is equal for all age groups, because it covers government expenditure that cannot be addressed more to one person than to another. Everyone is assumed to benefit defense expenditures or spending on public order in the same amount. It can be argued if this component should be added to the framework, because of these equal patterns for all age groups.

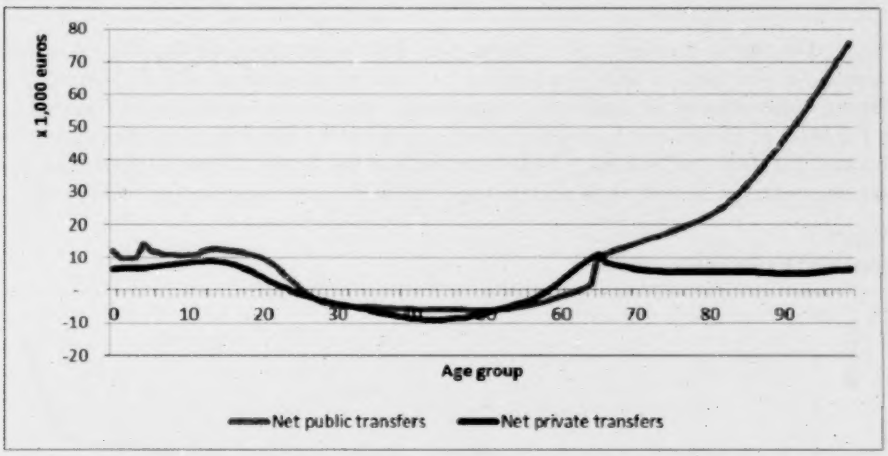
Figure 5
Age profiles for average consumption



34. The distribution of social transfers in kind is done separately for education and healthcare, because these two components are strongly dependent of the age dimension. The young benefit the education spending most and average spending on healthcare increases with age. The other social transfers in kind cover mainly expenses for old age.

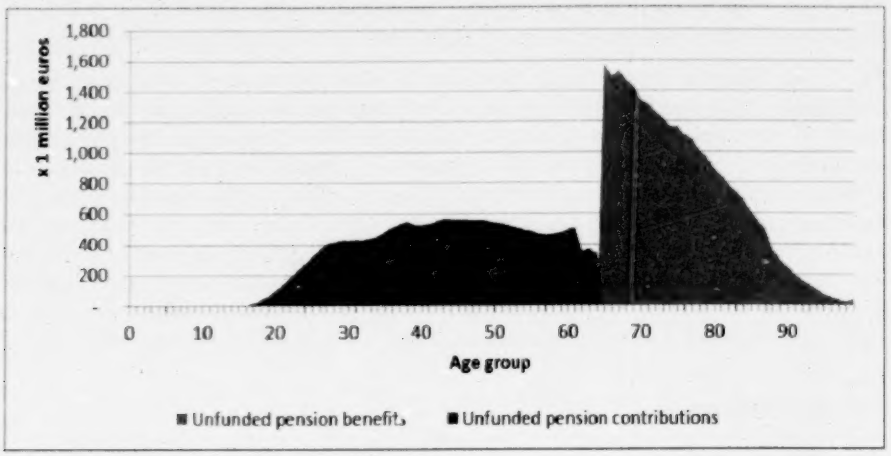
35. The lifecycle deficit has to be covered, either by transfers or by asset based reallocations. The transfer account results in net public transfers and net private transfers. Net public transfers are the balancing item of all transfers received from the government (social transfers in kind, state pensions, unemployment benefits, etc.) and the transfers paid to the government (taxes, social contributions). Figure 6 shows that net benefits are positive for the age groups with a lifecycle deficit. The net benefits rise sharply for the age groups over 65 years, because of the increasing healthcare and old age benefits after the retirement age. As said in the introduction the baby boom generation reaches this retirement age and these profiles will burden the society as a whole when more and more elderly benefit them. Current public policy aims to increase the retirement age to at least 67 instead of 65 years.

Figure 6
Transfer reallocations



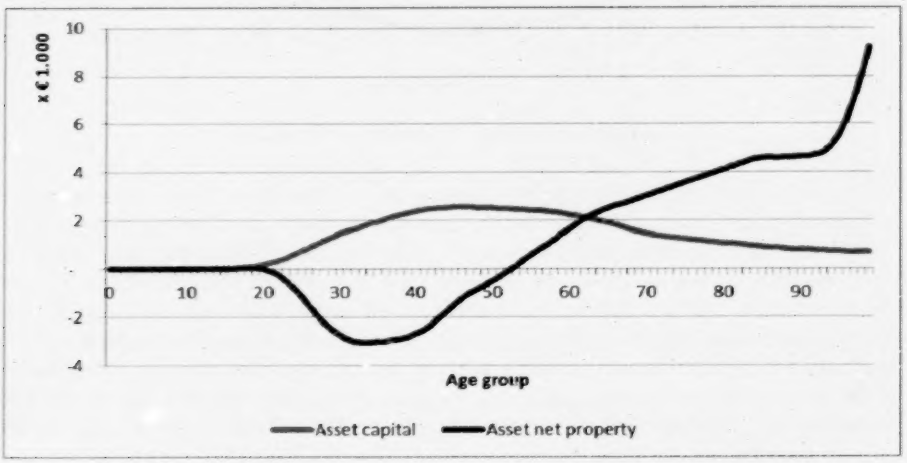
36. Net public transfers are negative during the working ages, because many social contributions are linked to the labor income, just as the income tax is. Net private transfers include the intrahousehold transfers, going from the household head to the other members with insufficient disposable income to cover their consumption. For the young the net private transfers equal the private consumption as they cannot work by definition until they are 15 years old and do not receive any benefits before that age either. The choice of who is the household head is strongly gender biased, because an important aspect in this decision is the level of personal income. Often it is the male who earns most. This also means that intrahousehold transfers flow from the working to the not working. Also included in the private transfers are the funded pension benefits. These account for most of the private transfers for the age groups after 65 years.

Figure 7
Aggregate values for unfunded pension benefits and contributions



37. The public transfers can be further specified to their purpose showing interesting insights in who pays to and who benefits from the social schemes. Figure 7 shows the known distribution of the (aggregate values of the) unfunded pensions that are financed by a Pay-As-You-Go system. The ageing society pressures the existence of a scheme like this because the number of working people decreases and the number of people benefitting this scheme increases. Already right now the total contributions do not cover the total benefits.

Figure 8
Net asset based reallocations



38. Asset based reallocations are divided into capital income and (net) property income. Capital income is or can be used in the production process. Part of the income of self-employed is considered a return on capital, also the operating surplus stemming from the use or renting of dwellings is considered an asset based reallocation. Net property income equals the inflow of interest, dividends etc. minus paid interest. Net property income is positive for the age groups over 50 years.

39. This approach initiated by the NTA project is considered promising to capture intergenerational flows in the national accounts framework. When more than one year is considered changes over time become apparent, allowing for analysis on trade-offs between

public and private pension schemes or public and private healthcare. When the accounts are complemented with a household production account for example, shifts in market services or intrahousehold transfers could be analyzed. And as seen by figure 7, it gives insight in who benefits and who pays the welfare state.

V. Conclusions

40. The well-known Stiglitz-Sen-Fitoussi report has recommended a shift of emphasis from the current production-oriented system of economic measurement to one focused on understanding socio-economic inequalities between groups of households. This is accomplished by looking at the joint distribution of household income, consumption and wealth. Undoubtedly, the intergenerational dimension of the economic transfers becomes relevant within the shifted paradigm. It has lately been considered and studied within the NTA project led by Lee and Mason. The remarkable output of their efforts is known today as the System of National Transfer Accounts which aims to provide at aggregate level a measure of the reallocations of economic resources across various age groups. These two mentioned ideas are tackled within Statistics Netherlands in two projects that share some similarities. The same economic sector is considered and the same data sources are used for additional information, however the approaches taken are different as well as is shown in this article.

41. The household breakdown is a recently developed statistic, inspired by Stiglitz-Sen-Fitoussi report and influenced by the work done in the EGDNA. It allows us to look at distributions over households groups and inequalities between them. This is done for income and consumption including the social transfers in kind. Also wealth is considered, up until now this dimension was not yet covered when distributions were considered in the national accounts.

42. The approach of the NTA is considered promising to capture the intergenerational flows in an national accounts framework. Currently the results for the ageing society project are far less developed than for the household breakdown. Future research should focus on the explicit link between the SNA and NTA variables and the development of other accounts, such as the household production account, the capital transfer account and the wealth account. Also additional personal characteristics can be studied, like gender or socio-economic status.

43. Both projects show that the combining the macro aggregates of the national accounts with distributional information taken from micro source can enrich the national accounts and the understanding of the households sector as a whole.

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Annex

Household categories

Household category	Household group
Housing status	Owners
	Renters with subsidies
	Renters without subsidies
Household composition	Single males
	Single females
	Single parent families
	Couples with children
	Couples without children
	Other households
Main source of income	Wages and salaries
	Income from self-employment
	Transfers because of old age
	Other transfers
Age of the head of the household	Younger than 35 years old
	35 – 50 years old
	50 – 65 years old
	65 years and older
Standard of living	1st quintile (20% households with the lowest disposable income)
	2nd quintile
	3rd quintile
	4th quintile
	5th quintile (20% households with the highest disposable income)